

P23869.S03

What is claimed is:

1. A lubricating device of a reciprocating compressor comprising:
a pumping unit that pumps lubrication oil contained in a lower portion of a case;
a front frame having a suction hole which supplies the lubrication oil pumped from the pumping unit to a sliding part within the case, and a discharge hole which discharges the lubrication oil after performing a lubrication operation;
and
a lubrication oil storage arranged at a front of the discharge hole that stores the lubrication oil discharged to the discharge hole for a predetermined time and then discharges the lubricating oil.
2. The lubricating device of claim 1, wherein a cross-sectional area of the discharge hole of the lubricating device is larger than a cross-sectional area of the suction hole.
3. The lubricating device of claim 1, wherein the lubrication oil storage comprises:
a lateral wall portion that protrudes from a front surface of the front frame with a predetermined width for covering right and left sides of the discharge hole;
and

P23869.S03

a frontal wall portion that contacts a front surface of the lateral wall portion for forming a lubrication oil storage space together with the lateral wall portion.

4. The lubricating device of claim 3, wherein the lateral wall portion of the lubrication oil storage protrudes at the front surface of the front frame and then extends at an engaging portion that is engaged with a discharge cover of the front frame.

5. The lubricating device of claim 3, wherein the front wall portion of the lubrication oil storage is an extended portion of a cover plate engaged between an engaging portion of the front frame and a discharge cover attached to the front frame.

6. The lubricating device of claim 3, wherein the front wall portion of the lubrication oil storage is lower than the lateral wall portion so that the lubrication oil in the storage space can flow over the front wall portion.

7. The lubricating device of claim 1, wherein the lubrication oil storage comprises:

a lateral wall portion protruding at a front surface of the front frame for covering right and left sides of the discharge hole; and

P23869.S03

a frontal wall portion integrally formed at a front surface of the lateral wall portion for covering a front surface of the discharge hole and forming a lubrication oil storage space.

8. The lubricating device of claim 7, wherein a height of the front wall portion is lower than a height of the lateral wall portion.

9. The lubricating device of claim 7, wherein the lateral wall portion and the frontal wall portion extends towards one side of an engaging portion engaged with the discharge cover of the front frame.

10. The lubricating device of claim 1, wherein the lubrication oil storage comprises:

a lateral wall portion protruding from a lateral surface of a cover plate mounted between an engaging portion of the front frame and a discharge cover for covering right and left sides of the discharge hole; and

a frontal wall portion extending from one edge of the cover plate for covering a front surface of the discharge hole and forming a lubrication oil storage space.

11. A lubricating device of a reciprocating compressor comprising:
a pumping unit that pumps lubrication oil contained in a lower portion of a case;

P23869.S03

a front frame having a supply hole which supplies the lubrication oil pumped from the pumping unit to a sliding part within the case and a discharge hole which discharges the lubrication oil upon completion of a lubrication operation;

a lubrication oil storage arranged at a front surface of the discharge hole for storing the lubrication oil discharged from the discharge hole for a predetermined time and then discharging the lubrication oil; and

a lubrication oil guide that guides the lubrication oil discharged from the discharge hole to a lower portion of the case and preventing the lubrication oil discharged through the discharge hole from flowing to an air hole formed in the front frame.

12. The lubricating device of claim 11, wherein a cross-sectional area of the discharge hole is larger than a cross-sectional area of the supply hole.

13. The lubricating device of claim 11, wherein the lubrication oil storage comprises:

a lateral wall portion protruding from a front surface of the front frame with a predetermined width for covering right and left sides of the discharge hole; and

a frontal wall portion contacting a front surface of the lateral wall portion for forming a lubrication oil storage space with the lateral wall portion.

P23869.S03

14. The lubricating device of claim 13, wherein the lateral wall portion of the lubrication oil storage protrudes at the front surface of the front frame and then extends at an engaging portion that is engaged with the discharge cover.

15. The lubricating device of claim 13, wherein the front wall portion of the lubrication oil storage is extended at a cover plate engaged between the engaging portion of the front frame and the discharge cover.

16. The lubricating device of claim 13, wherein the front wall portion of the lubrication oil storage is lower than the lateral wall portion so that the lubrication oil in the storage space can flow over the front wall portion.

17. The lubricating device of claim 13, wherein the lubrication oil guide comprises a guide portion which covers the air hole by extending from the lateral wall portion protruded at a front surface of the front frame towards right and left sides with a predetermined curved surface shape.

18. The lubricating device of claim 15, wherein the lubrication oil guide comprises a guide portion which covers the air hole by extending from both sides of the cover plate with a predetermined curved surface shape.